

## Magnetic Characteristics Sintered NdFeB

	Br				HcB		HcJ		BHmax			
	T		kG		kA/m	kOe	kA/m	kOe	kJ/m <sup>3</sup>		MGOe	
	max	min	max	min	min		min		max	min	max	min
N52M	1.48	1.42	14.8	14.2	1019	12.8	1114	14	422	390	53	49
N50M	1.46	1.39	14.6	13.9	1011	12.7			414	382	52	48
N48M	1.43	1.37	14.3	13.7	995	12.5			398	358	50	45
N45M	1.38	1.32	13.8	13.2	971	12.2			374	334	47	42
N50H	1.46	1.39	14.6	13.9	1035	13	1273	16	414	374	52	47
N48H	1.42	1.36	14.2	13.6	1011	12.7			398	358	50	45
N46H	1.4	1.34	14	13.4	995	12.5			382	342	48	43
N44H	1.37	1.3	13.7	13	963	12.1			366	326	46	41
N45SH	1.38	1.32	13.8	13.2	987	12.4	1592	20	374	334	47	42
N42SH	1.34	1.28	13.4	12.8	955	12			350	310	44	39
N40SH	1.32	1.26	13.2	12.6	939	11.8			342	302	43	38
N38SH	1.3	1.23	13	12.3	923	11.6			326	287	41	36
N40UH	1.32	1.26	13.2	12.6	955	12	1989	25	334	302	42	38
N38UH	1.28	1.22	12.8	12.2	923	11.6			326	287	41	36
N35UH	1.25	1.18	12.5	11.8	891	11.2			302	263	38	33
N33UH	1.22	1.14	12.2	11.4	859	10.8			287	247	36	31
N38EH	1.28	1.22	12.8	12.2	923	11.6	2387	30	318	287	40	36
N35EH	1.23	1.17	12.3	11.7	883	11.1			295	263	37	33
N33EH	1.2	1.14	12	11.4	859	10.8			287	247	36	31
N30EH	1.17	1.09	11.7	10.9	812	10.2			263	223	33	28
N33EHS	1.2	1.14	12	11.4	859	10.8	2785	35	287	247	36	31
N30EHS	1.17	1.09	11.7	10.9	820	10.3			263	223	33	28
N28EHS	1.13	1.05	11.3	10.5	796	10			247	207	31	26

## Sintered Sm<sub>2</sub>Co<sub>17</sub>

	Br				HcB		HcJ		BHmax			
	T		kG		kA/m	kOe	kA/m	kOe	kJ/m <sup>3</sup>		MGOe	
	max	min	max	min	min		min		max	min	max	min
SmCo 27	1.1	1.04	11	10.4	755	9.5	1592	20	235	200	29.5	25
SmCo 29	1.13	1.07	11.3	10.7	775	9.7	1592	20	250	215	31.5	27

## Sintered SmCo<sub>5</sub>

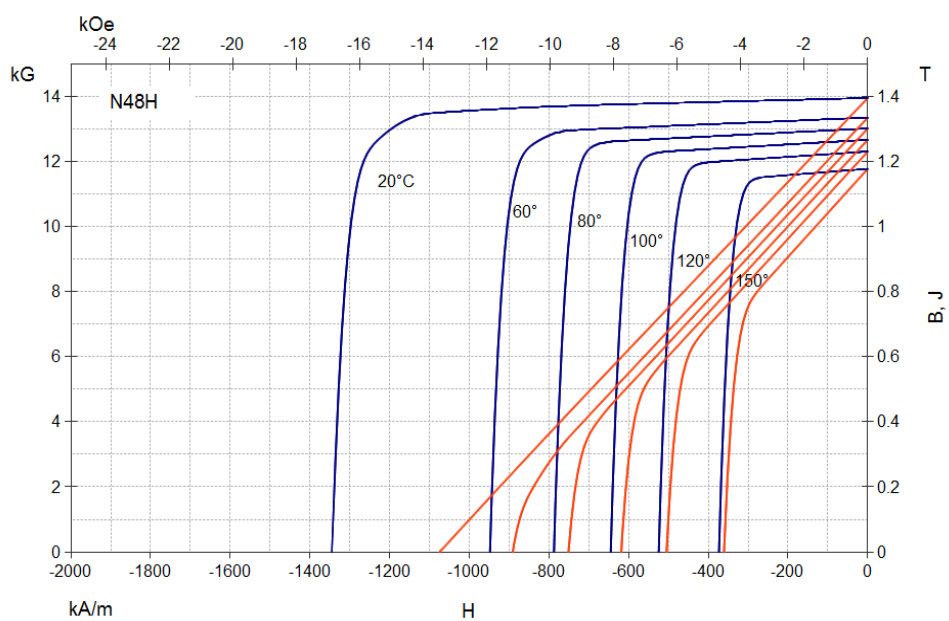
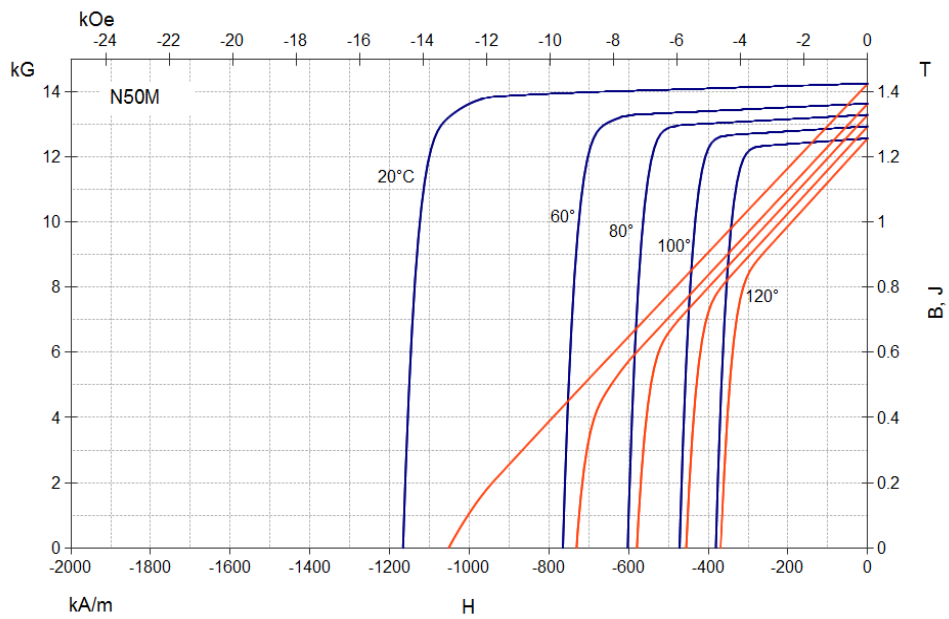
	Br				HcB		HcJ		BHmax			
	T		kG		kA/m	kOe	kA/m	kOe	kJ/m <sup>3</sup>		MGOe	
	max	min	max	min	min		min		max	min	max	min
SmCo 20	0.94	0.86	9.4	8.6	660	8.3	1830	23	175	143	22	18
SmCo 22	0.98	0.9	9.8	9	690	8.7	1830	23	190	159	24	20

## Other properties<sup>1</sup>

		NdFeB		Sm <sub>2</sub> Co <sub>17</sub>		SmCo <sub>5</sub>	
Temperature coefficient of Br	%/°C	0.09 – 0.12		0.035		0.045	
Density	g/cm <sup>3</sup>	7.5 – 7.7		8.4		8.4	
Electric resistivity <sup>2</sup>	μΩm	c: 1.6	⊥c: 1.3	0.9		0.55	
Thermal expansion coefficient <sup>2</sup>	10 <sup>-6</sup> / K	c: 6.5	⊥c: -1	c: 9	⊥c: 11	c: 6	⊥c: 12
Thermal conductivity	W / m·K	7		10		10	
Specific heat	J / kg·K	410		350		370	

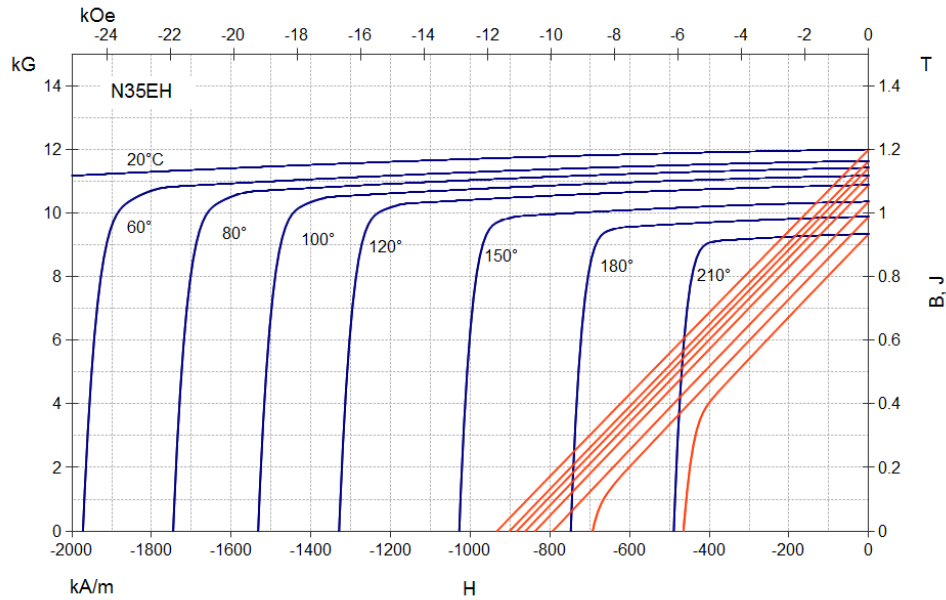
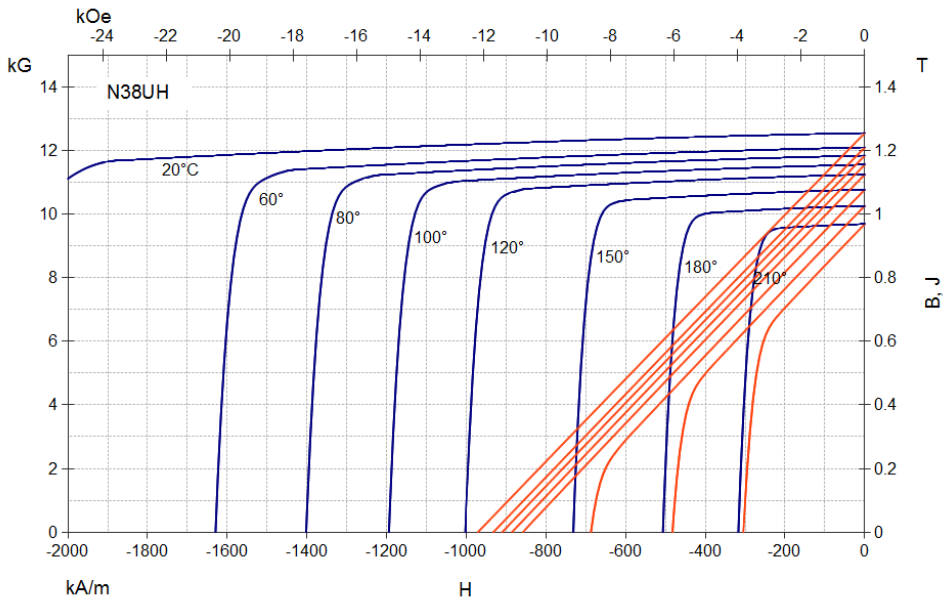
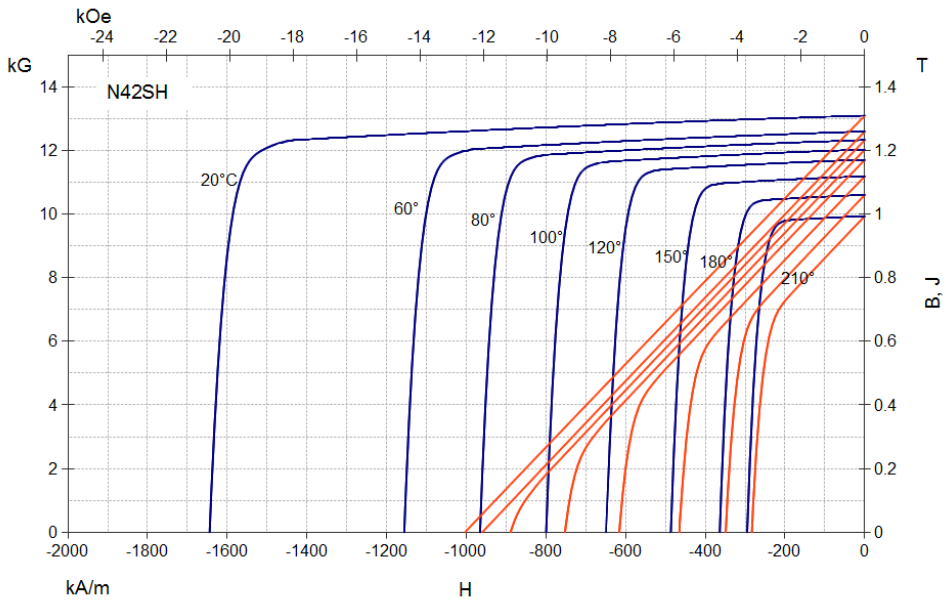
## Typical demagnetization curves

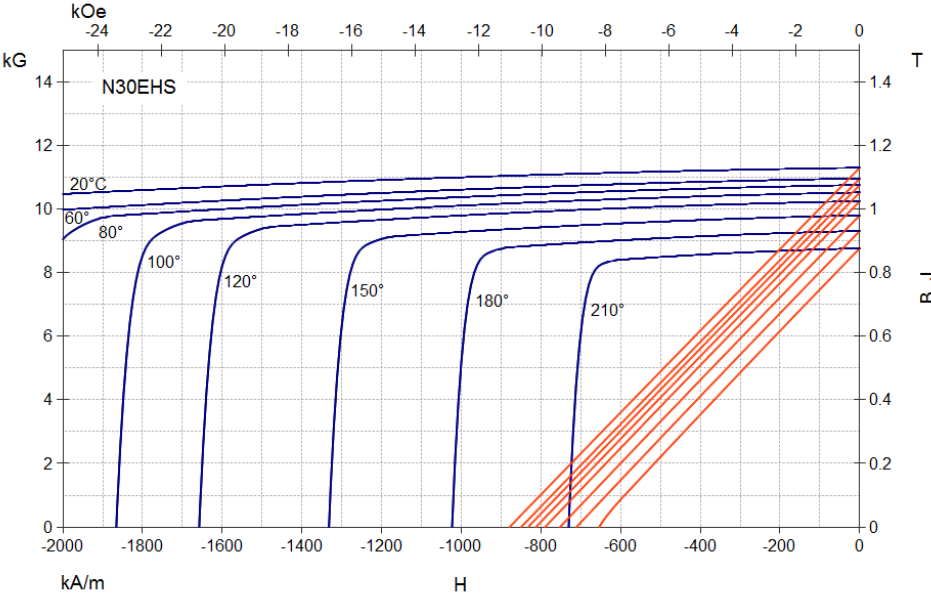
### NdFeB



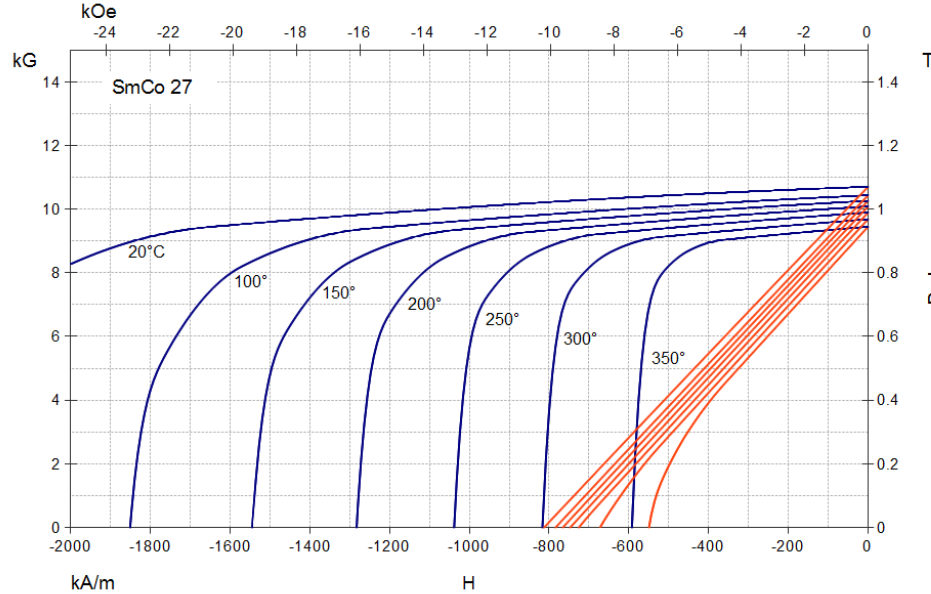
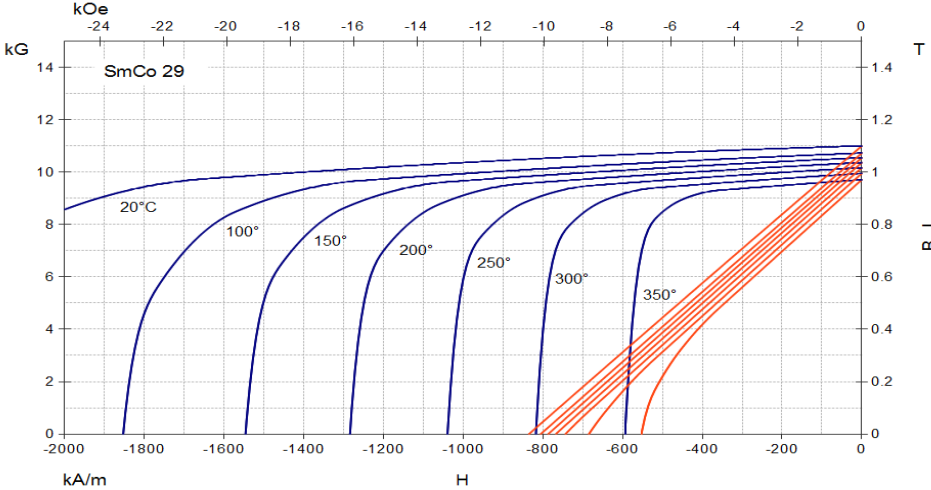
1 The figures in this table are indicative values. More precise information may be available for individual grades.

2 ||c, ⊥c: Parallel / perpendicular to the (preferred) direction of magnetization.

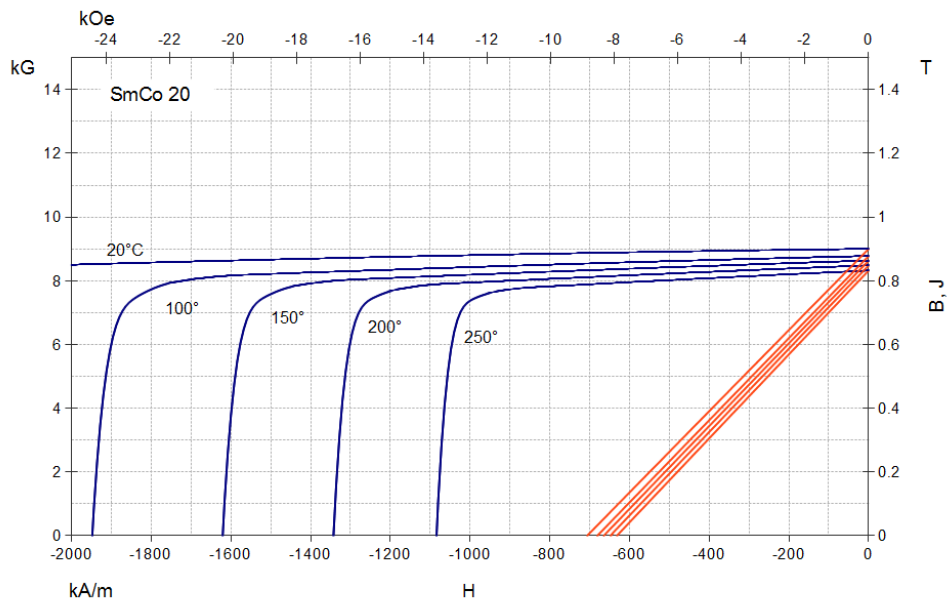
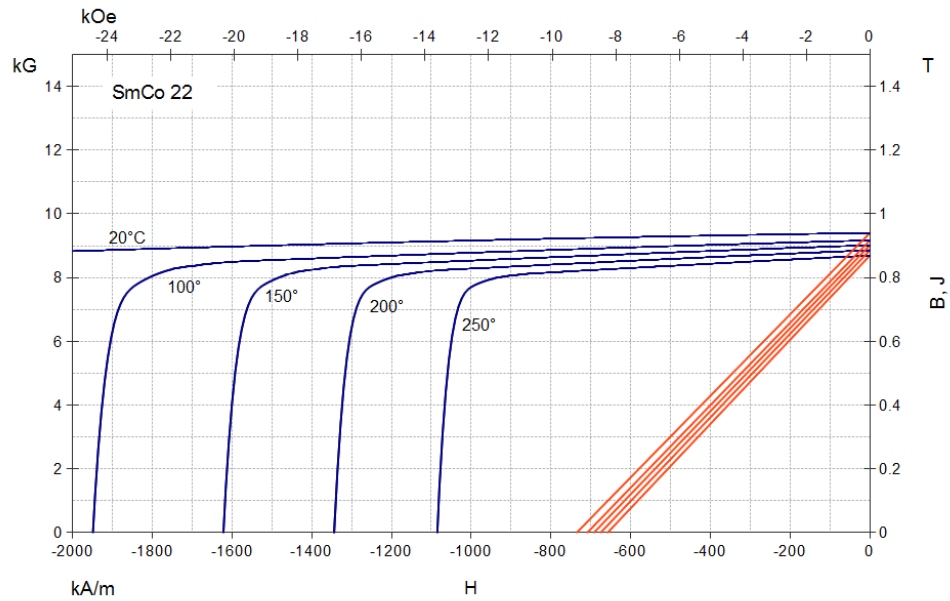




Sm<sub>2</sub>Co<sub>17</sub>



## SmCo<sub>5</sub>



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